

Claims

What is claim is:

1. An antenna assembly comprising:
 - a antenna carrier including an antenna module receiving region;
 - an antenna module including first and second module surfaces opposed to one another, the antenna module including an antenna situated on the first module surface, the antenna module further including a radio frequency transceiver coupled to the antenna; and
 - the antenna carrier including a passive tuning element situated adjacent the module receiving region, the passive tuning element exhibiting dimensions selected to cause the antenna to resonate at a predetermined frequency when the antenna module is placed in the module receiving region.
2. The antenna assembly of claim 1 wherein the passive tuning element exhibits a length which is among the dimensions selected to cause the antenna to resonate at the predetermined frequency.
3. The antenna assembly of claim 1 wherein the antenna carrier slidably receives the antenna module therein.
4. The antenna assembly of claim 1 wherein the passive tuning element exhibits a U-shape.
5. The antenna assembly of claim 1 further comprising:
 - an antenna module retention member on the passive tuning element that secures the antenna module in the antenna carrier.

6. The antenna assembly of claim 5 wherein the antenna module retention member engages a ground area of the antenna module when the antenna module is secured in the antenna carrier.
7. The antenna assembly of claim 1 further comprising:
 - a module receiving surface on the module receiving region; and
 - a recess on the module receiver surface whereby the passive tuning element is situated in the recess and flush with the module receiver surface.
8. An information handling system (IHS) comprising:
 - a processor;
 - a memory coupled to the processor; and
 - an antenna carrier including an antenna module receiving region for receiving an antenna module therein, the antenna module being coupled to the processor.
9. The IHS of claim 8 including a network interface which couples the antenna module to the processor.
10. The IHS of claim 8 wherein the antenna carrier slidably receives the antenna module in the antenna module receiving region.
11. The IHS of claim 8 further comprising:
 - a passive tuning element situated adjacent the module receiving region, the passive tuning element exhibiting dimensions selected to cause an antenna to resonate at a predetermined frequency when the antenna module is received in the module receiving region.

12. The IHS of claim 11 wherein the passive tuning element exhibits a length which is among the dimensions exhibited by the antenna to cause the antenna to resonate at the predetermined frequency.
13. The IHS of claim 11 wherein the passive tuning element exhibits a U-shape.
14. The IHS of claim 11 further comprising:
 - a module receiving surface on the module receiving region; and
 - a recess on the module receiver surface whereby the passive tuning element is situated in the recess and flush with the module receiver surface.
15. The IHS of claim 11 further comprising:
 - an antenna module retention member on the passive tuning element that secures the antenna module in the antenna carrier.
16. An information handling system (IHS) comprising:
 - a processor;
 - a memory coupled to the processor;
 - an antenna module including an antenna, the antenna module further including a radio frequency transceiver coupled to the antenna and the processor; and
 - an antenna carrier including a module receiving region for receiving the antenna module therein, the antenna carrier including a passive tuning element situated adjacent the module receiving region, the passive tuning element exhibiting dimensions selected to cause the antenna to resonate at a predetermined frequency when the antenna module is placed in the module receiving region.

17. The IHS of claim 16 wherein the passive tuning element exhibits a length which is among the dimensions exhibited by the antenna to cause the antenna to resonate at the predetermined frequency.
18. The IHS of claim 16 wherein the antenna carrier slidably receives the antenna module therein.
19. The IHS of claim 16 wherein the passive tuning element exhibits a U-shape.
20. The IHS of claim 16 further comprising:
 - an antenna module retention member on the passive tuning element that secures the antenna module in the antenna carrier.
21. The IHS of claim 20 wherein the antenna module retention member engages a ground area of the antenna module when the antenna module is secured in the antenna carrier.
22. The IHS of claim 16 further comprising:
 - a module receiving surface on the module receiving region; and
 - a recess on the module receiver surface whereby the passive tuning element is situated in the recess and flush with the module receiver surface.
23. An information handling system (IHS) comprising:
 - a processor;
 - a memory coupled to the processor;
 - an antenna carrier including an antenna module receiving region for receiving an antenna module therein;
 - the antenna module being coupled to the processor and including

first and second module surfaces opposed to one another, the antenna module including an antenna situated on the first module surface, the antenna module further including a radio frequency transceiver coupled to the antenna; and

the antenna carrier including a passive tuning element situated adjacent the module receiving region, the passive tuning element exhibiting dimensions selected to cause the antenna to resonate at a predetermined frequency when the antenna module is placed in the module receiving region.

24. The IHS of claim 23 wherein the antenna carrier slidably receives the antenna module therein.
25. The IHS of claim 23 wherein the passive tuning element exhibits a U-shape.
26. The IHS of claim 23 further comprising:
an antenna module retention member on the passive tuning element that secures the antenna module in the antenna carrier.
27. The IHS of claim 26 wherein the antenna module retention member engages a ground area of the antenna module when the antenna module is secured in the antenna carrier.
28. The IHS of claim 23 further comprising:
a module receiving surface on the module receiving region; and
a recess on the module receiver surface whereby the passive tuning element is situated in the recess and flush with the module receiver surface.

29. A method of tuning an antenna in an information handling system comprising:
- providing a processor;
 - providing a memory coupled to the processor;
 - providing an antenna carrier including an antenna module receiving region for receiving an antenna module therein;
 - coupling the antenna module to the processor;
 - providing an antenna situated on the antenna module;
 - providing a radio frequency transceiver coupled to the antenna;
 - providing a passive tuning element situated adjacent the module receiving region in the antenna carrier; and
 - tuning the antenna module by selecting the length of the passive tuning element to cause the antenna to resonate at a predetermined frequency when the antenna module is placed in the module receiving region.